#### A TRIP TO MOUNT TACOMA.

ASPECT OF THE GREAT MOUNTAIN IN LATE OCTOBER.

Observations and Experiences of a Geolog-ical Surveying Party-A 150-mile View -Just Missed the Eruption.

TACOMA, Nov. 29.—The mountaineering sea son in the State of Washington is short, rarely extending beyond the months of July and August. In time, when comfortable hotels are scated at proper points, the season may be donbled in length, but at present everything, tents,

writer he made the journey from Tacoma to the nountain and return in three days, the quickest trip on record. At Carbon River, however, we left the trail and followed up the river bottom, crossing from one gravel bar to another by fording through the ice-cold and milky glacial water, or jumping from rock to rock where we could. At sunset we were not sorry to find a mossy bank where we could pitch the tent and spread our blankets, even though the river and a neighboring waterfall over 100 other conditions, would have prevented sleep.

Four miles of very hard walking, which required as many hours, brought us to the foot of blankets, and provisions, must be carried along. the great glacier, where we were glad to throw



and it is therefore, even aside from the dangers, more difficult to conquer some of our peaks than those of the Alps, where trained guides are plenty and routes well known.

The large amount of travel to Mount Tacoma during recent years has forced the building of a road which now extends from the city of Tacome almost to the base of the mountain, sixtyave miles being necessary to cover the air-line



MT. TACOMA FROM NEAR TACOMA. distance of forty-four miles to Paradise Park, which lies on the south flank of the mountain and covers about ten square miles. The entire mountain base covers over two hundred square miles, from which the mass of the giant rises as one majestic and solitary peak, with a rounded e-like summit 15,000 feet above the sea. Its wonderful system of glaciers is already famed



TOR RUMMOCKS AND CREVASSES. as being the greatest belonging to any single untain upon the globe.

In order to complete some geological survey ame necessary to make a trip to the mountain last month and to go by a new route and explore a part of the mountain very little known -the great Carbon Glacier, on the north slope



ABOVE THE CLOUDS, LOOKING ACROSS THE GLACIER CASON. which gets its name from the river which it heads, which river traverses some great coal fields in its journey to Puget Sound. Of course there was some novelty to this late trip, and the arty was soon made up, comprising Assistant Harry M. Sarvant, Photographer Heath, and two members of the Indian Commission—James

so hungry for a mountain trip that dangers and

From the little mining town of Wilkeson,

where the railroad ends, our route lay through

hardships were entirely forgotten.

off our heavy packs and take rest and food. The face of the glacier was an almost per-pendicular wall of ice, between two and three hundred feet high, and looked deep blue in color. The river issued, full grown, from a great arch at the base and rushed down the heavy grade of the valley with a force which carried great boulders with it. With some difficulty we scaled the face of the glacier where it was lowest and where sharp angular rocks were firmly held by the ice and furnished us a safe footbold. The glacier lay in deep cafion of volcanic rock, and was for the ower mile completely covered with moralnic debris. All the rocks were angular and of every size, and ranged in hardness from the softest

All this we could see from our tent door, and a great deal more, for the entire southern field of view and far up toward the zenith was filled by the majestic spow-covered form of Mount Taccoma. If one desires to learn the utter poverty of our language he may try to describe this mountain. Fifty-four East River bridge towers would not reach its height, nor would greater New York contain its base.

We were partially protected by a stunted growth of mountain firs, and a beautiful little lake furnished water. We built a fireplace of lava chips, and made our beds of juniper and heather. Slience was often broken by the roar of an avaianche, the charp crack of a glacier, or the crash of falling rocks. Ones, for shrill whistle of a marmor ware numerous, and with the white goats and wolves are the principal fanna. They often weigh as much as iwenty pounds, and are considered good eating by many.

Our evenings were spent in the cosey tent tellings stories, playing whist, or reading. Sometimes the midnight winds threatened to blow us off the mountain, and is required considerable faith in our large but light tent to alumber under such conditions. During the days we made excursions in all directions, on one occasion climbing the divide to an elevation of 8,000 feet. Our ronte lay along the right bank of the Carbon Glacier, and we made a special study of it. The flow of the ice is well illustrated here, for the bed or cradie is in places very uneven, and is twice crossed by granife dykes, which produce great catarons of ice. Below, for some distance, the surface of the glacier would be wool ogain be smooth, only to be again be worked, only to be again be worked, assumed the most grotseque of forms. At many places great snow fields, lying on the steep divides, fed the glacier would be worked on the steep fire and the cite and snow had assumed the most grotseque of forms. At many places great snow fields, lying on the steep fire and the cite and snow had assumed the most great fall in the classes proved the second of the gre

Looking down the glacier the view was very | tain climbers who had left the month before We reached Tacoma in three days.



fine, for the Carbon Valley is lined with "hills" higher than any of the lofty "mountain peaks" of the Eastern States, and we were almost up to their level. To the southward the grand old mountain was in plain view, and made the rest

of the country look flat by comparison.

The Carbon glacier does not flow straight, but follows several curves of its "cradle," and is therefore deeply rent into crevasses, and the straining ice often shows beautiful colors where it thwarts the sun's rays. As we proceeded these crevasses became very nunerous; indeed, there were soon more fissures than surface, and we were compelled along ridges and snow spans. One of our guests had to be pulled out of a crevasse to the edge of which he had clung as he slipped, and our other guest was frequently neard to remark that if he ever got away from there he would never leave home again. Now that he is safe at home he is

planning for another trip next season. planning for another trip next season.

It was quite dark when we got off the glacier, and, climbing a steep moraine, found ourselves in a little sheltered spot, with wood and water sufficient for our needs. Many persons make the mistake of eating ice and snow when on the mountain, and bring upon themselves the torture of thirst, sore mouths, and stomach

What a pity that we had not delayed our trip and seen the slight eruption which so many persons have claimed to have seen on Nov. ?! and ?!, when the clouds would part so that the top of the mountain could be observed for a few moments. There is no good reason for denying that the many persons in various localities saw volumes of smoke coming from the summit. Several eruptions of smoke have been witnessed in early days, and steam is always issuing from the crater. Let us hope that we will be treated to a first-class cruption in the near future, for there is nothing to be feared and much to be seen.

FRED G. PLUMMER.

STORY OF A BILLIARD BALL. Portrayed.



sleeps all day as is his But when the night draw due.

A-dreaming of his fav\*rite Then brightens up his festure.

Live face.



The game begins as does But presently, his pluck to ly a infecue he's made to He rushes madly on his wabble.





To see his rival miss the a queer scusation's oft be Fills with maliciou joys in the attempt to draw a his soul.



GREAT CREVASSES IN A BEND.

ON THE TRAIL.

OREAT ICE FALL NEAR THE HEAD OF THE GLA
CIERS.

Very dense forests for nine miles, following a
good trail to the Carbon River. This was the
same trail travelled by Mr. Garrett P. Serviss,
the astronomer, two years before, when with the



though he'd "bust"



nothing makes one and thus, without the least



### ON MANY TOPICS.

THE NEW BOSS.

Mr. Orace to Half of Him, for Sure. TO THE EDITOR OF THE SUN-Sir: The letter of "German-American" in to-day's issue of TRE SUN regarding the "boss" of the German-American Reform Union, Herman Ridder, suggests to me a consideration of the methods by which another "reform" organization, the State Democracy, has been governed.

William R. Grace is the boss of this band. He owns them. Grace pays the expenses, and the "boys" feel that he has a lien upon them, His lieutenants are mere chattels, and their servility is as complete as though they had sold themselves into political slavery by contract,

signed, sealed, and delivered.

From the start the control exercised by Grace over the State Democracy has been that of s proprietor. He dictated the selection of the listrict leaders, who had to swear persons

proprietor. He dictated the selection of the district leaders, who had to swear personal fealty to their creator. Any man who refused to take the oath of allegiance was placed on Rowdedow's black list.

The primary object of the State Democracy was to fight Tammany Hall, yet so thoroughly confident was Grace that he carried his organization in his pocket that he attempted to carry through a "deal" with Tammany whereby Great Scott was to have been the union candidate for Mayor. The plot failed owing to its defeat in the Executive Committee of Tammany Hall. It would have met with no difficulty if it had been placed before the State Democracy for ratification.

The State Democracy was to be a straight-out Democratic organization, loyal to the core. When the conspiracy to join hands with Tammany fell through, Grace, in a spirit of revenge, determined to endorse the Republican Strong. The leaders were commanded at the Convention to cast the votes of their delegations for Strong, no matter how the delegates voted.

When Grace found that some of his closer associates—Fairchild, Peckham, &c., would try to give him trouble if he attempted to force through the Executive Committee an endorsement of Hill's nomination, he played the trick on them of making the endorsement at a general mass meeting. Did Croker ever do anything so high-handed?

The two new bosses, Grace and Ridder, have formed a partnership. Look out for this "combine." Nothing that we have yet experienced in municipal politics will equal the "reform" government we are to enjoy under the firm of Ridder & Rowdedow.

DEC. 4.

A Dis-Graced Democrat.

BRUTALITY IN COLLEGE SPORTS. An Amberst Graduate's Protest Against Football as Played Now.

A DIS-GRACED DEMOCRAT.

TO THE EDITOR OF THE SUN-Sir: I have read with great interest the letter signed, " A Graduate of Amherst" which appeared in TRE SUN recently anent the game of football. I fully agree with all that he says in regard to the "rufflanism" practised by football players and the weak-ness of college faculties in taking no vigorous measure: to put a stop to it. I regret that your correspondent did not give his full name and address, as he would find many sympathizers to uphold h.m in the position which he takes.

As an alumnus of Amberst College myself, I feel a sense of degradation whenever I read accounts of these brutal exhibitions. The sport has degenerated very much since the days when was at college. The same may be said of athletics generally. The tendency has been constantly to overdo and carry to extremes. The athletic field has usurped the place of the class oom, and the signals of the football captain are more carefully studied than the lectures of he college professor.

During the four years while I was at college from 1872 to 1876, athletics were not regarded as the sole test of scholarship. At the same time bodily culture was not neglected. Each class had its regular gymnastic exercise every morning at the "gym," under the instruction of Dr. Hitchcock. We practised with dumb bells and wands, and went through various exercises including running, vaulting, &c. This was all that was necessary to start the blood in circulation, to expand the chest, and to keep all the functions of the body in healthy activity, so that we might realize the great desideratum of

that we might realize the great desideratum of "mens sano in sano corpore."
We also had our baseball and our rowing as recreations, and at the famous regatta on the Connecticut River at Springfield, where a dozen or more colleges competed, the Amberst boat came in ahead. Our racing crews rowed in six-cared gigs or shells, and these contests, as well as those in baseball and athletics generally, were thrown open to all the colleges for competition, and not confined to a scleet few, as at present. All this occupied but a small portion of our time, and the various sports were conducted in such a gentlemanly manner that no fatallities ensued, as so often happens now. At that time athletics occupied a subordinate place. Now, unfortunately, it seems to be the chief object of a college or university education.

Now, unfortunately, it seems to be the chief object of a college or university education.

I witnessed a few years ago a football game between two leading colleges, at which there was an exhibition of such rough play and brutality that I became thoroughly disgusted, and have never cared to attend another football match since. If the object of our college education is to turn out prize fighters or bullies or "toughs" I can see the utility of such a "sport," but if, on the contrary, the object is to make them educated and courteous gentlemen, the present method of playing football will hardly accomplish that purpose. The manner in which it is now conducted is wholly brutal, and is de-

present method of playing football will hardly accomplish that purpose. The manner in which it is now conducted is wholly brutal, and is demoralizing to both players and spectators. If it cannot be modified and brought within the bounds of reason it would be much better to alanden it allocather.

Our college faculities are largely responsible for the present condition of affairs, as your correspondent truthfully says. They encourage it because they think it helps to advertise their institutions. It is only necessary to read in the daily newspapers of the deaths and serious casualties resulting from football to convince any one of the great danger there is in the sport. In yesterday's paper, for example. I find an account of the "serious and possibly fatal injury of a quarter back" of a certain college team, and an accident to another football player elsewhere, who suffered "concussion of the brain, and is now in a critical condition."

These matters are of almost daily occurrence it seems to me, therefore, that an attempt should be made to arouse a sentiment among the alumni and trustees of the various colleges, to relegate athletics to a subordinate position in the college curriculum, and in any event to put a final stop to the present method of playing football. If the reply is that it cannot be played otherwise than roughly, then abolish it altogether.

Alumnus of Amherst College, Class of 1876.

#### Scholars Will Not Yield to Athletes. TO THE EDITOR OF THE SUN-Sir: Youredi-

torial in to-day's SUN remonstrating against the apotheosis of the college at hlete at the expense of the college scholar is, I think, well timed, and I very much hope it will be effective in diminish ing the athletic evil in the colleges. I would do away altogether with intercollegiate athletica, believing in that step alone is found the remedy which will cure the students of athletic mania. But I do not agree with you that " what the colleges are producing is the professional athlete, the professional instructor in athletics, the professional college man"—whatever that means. My experience at Yale was—and I have been but two years out of college-that there are there heroes other than athletes; that these are as well

heroes other than athletes; that there are there heroes other than athletes; that these are as well thought of and cheered as the man of muscle, in fact more so; and these heroes are the winners of literary prizes and the leaders in philosophic and scientific thought and scholarly endeavor. The race for the prizes and leaderships and the achievements realized are more discussed than are canvassed the merits of the athletes.

Four years ago the class of 1802 eagerly watched the race for the valedictory. A special bulletin announced that ——had won the Yale Litiprize, a great honor at Yale. The winner of the Tes Eyck prize in speaking was cheered in the college yard; the announcement of the winner of the Cobsien Club medal was heard with unultuous appliance, the winner being virtually crownest with flowers. What athlete was ever so honored? The result of the competition for the Townsend premiums (essay writing? was awalted with intense interest, and the successful men were heartly congratulated when they were made known. The Chairman of the Yale Lift, the Chairman of the Pale Naca, the valedictorian of the class of 1802, and numerous other prize takers were at least as famous in college as McClung. Heffelfinger, Morrison, Balliet, athletes in the class of 1802.

They were not so well known to the nation, but that is not the college's fault. Yale does not run the newspapers. I cannot now bring to mind the name of a member of the Committee of Seventy that Mayor Havemeye appeared to an office of ponts or power. Mr. John Wass. 1: was made a Tax Commissioner. Comprising Green was responsible for that appointment. When the was made a fax Commissioner. Comptroller Green was responsible for that appointment.

I invoke the record for the enlightenment of Brother Gallagher: Roswell D. Hatch of the Committee of Seventy became, by appointment of Mayor Havemeyer, a Fire Commissioner; Henry G. Stebbins of the Commissioner; became, by appointment of Mayor Havemeyer, Park Commissioner; John Wheeler of the Commistee of Seventy became, by appointment of Mayor Havemeyer, Park Commissioner. That is a partial list. Some of the other members of the Committee of Seventy who accured office during the reform era were the following: John A. Dix, Governor; Francis C. Barlow, Attorney-General; Joseph Blumenthal and Charlest rary, members of Assembly; George C. Barrett, Supreme Court Judge; Isaac H. Balley, Commissioner of Charlities and Correction: George W. Lane, City Chamberlain, and William H. Neilson, President of the Board of Education, exclusive of those acting as counsel in suits brought by the city, and of those who recommended others (relatives or friends) to office under the local reform administration.

New York, Dec. 6, 1884. New York, Dec. 5. reform administration. New YORK, Dec. 6, 1894.

### THE BOARDING HOUSE PROBLEM. Why Bo the Veteran's Shabby Rooms Braw Better Than the Novice's Pine House.

TO THE EDITOR OF THE SUN-Sir: In your valuable paper you published a short account of a beginner in the boarding-house business, whose experience puzzled her. You state the facts in THE SUN's usual teres style, but you do not complete the story. Her house is probably empty, with the winter staring her in the face, while profitable boarders are crowding the shabby apartments to overflowing. Why this? You will confer a favor if you will shed the light of The Sun's rays on this anomaly.

NOTES ON SCIENCE AND INDUSTRY.

TO THE EDITOR OF THE SUN-SIT: A recent

any other year." I have just been over the route

say that all along the route the crop is much less than last year. Here in Starke, and in the northern part of the State, the crop is being rushed to market rapidly for fear of frost, but

the oranges are far from being ripe, and there-fore are not very sweet. In the southern part of

the State they are later, and a large proportion of the crop is so green that many trees appear to

STARKE, FLA., Nov. 28,

18 IT SO?

John Burns and the Socialists,

Burns] by their guttural cries or to drive him

from the platform."

The German Socialists who were at Cooper

Union have received Mr. Burns heartly and

with all the applause due to a man who has stood

up so bravely and prominently for the cause of

labor. The only disturbance during the address

of Mr. Burns took place at the rear part of the

platform. It prompted the Chairman, Mr.

Gompers, to rise and remonstrate with some one

behind him, and this, not being understood by

the audience, did cause some unrest in the hall,

At any rate, they were not "German Socialists' who attempted to drive Mr. Burns from the

platform.
It was after Burns had concluded his address

and thundering applause and before the funny man who followed him had made his appear-ance that there came from among the audience out of several hundred throats the cry, "De Leon! De Leon!"

MUNICIPAL.

Mayor Havemeyer and the Old 70.

TO THE EDITOR OF THE SUN-Sir: The cour-

Baltimer (such is the authentic Maryland pro-

Havemeyer, is interesting. But in one respect, at least, it recalls the expression used by Eugene

From a Friend of Leon Abbett.

TO THE EDITOR OF THE SUN-SIF: In to-day's SUN it is said that the "German Socialists" at the John Burns meeting at Cooper Union Monday night "had attempted to silence him [John

Perhaps you have means to get a true explanation from some experienced hand.

I am a novice myself, just like the one you refet to. The "eligible house" in the "good block up town," near Fifth avenue of course, the "expensive furniture," the "low rates." the applicants, and the beating down process—all these experiences you mention were mine. I was a hopeful tyro, but hope does not pay rent. A hundred and fity alleged would-be bearders have called and sat in judgment on my elegant rooms, and sat down, metaphorically speaking, on everything in them, and, having offered me prices far better adapted to Avenue A than Fifth avenue, have still gone off and boarder elsewhere. It grieves me, and I wonder why. Can the able young men of The Sun interview some manager of a prosperous, long established, shabby, miserly, aromatic boarding house and find out why all the novices find boarders as scarce as big game on the prairies? A choice location, expensive furniture, rich decorations, cleanliness that would excite envy in a Quaker, a table as bountiful, beautiful, and well served as a gentleman's should be, together with every reflement of luxury and comfort that can be desired in a perfect home are all but broken reeds for a novice to lean upon. Why, oh, why does the veteran and her shabby house succeed?

M. C. C. A modified method for securing direct treatment of pulp leaving the battery is explained in an Australian mining journal, which, it ap-pears, overcomes the difficulties met with in running the pulp direct into cyanide vats. The new plan is to allow the pulp to settle through new plan is to allow the pulp to settle solutions which, below their surfaces, are in a state of rest, it being found that, by this means, successive portions of the sands carry down with them a certain proportion of the slimes, an intimate mixture being thus brought about without segregation, and, in consequence, the resulting product is easily susceptible of cyanide treatment. To effect this, the pulp leaving the battery is run direct into intermediate vats fitted with bottom discharges, in which the mixing is accomplished prior to the tailings being carried to the cyanide vats proper for treatment. It is asserted that the extra cost due to the necessity for a single habilling is extremely small, and that the slight economic disadvantage thus occasioned is simply counterbalanced by the increased percentage of extraction in consequence of the tailings having been brought into the condition most suitable for chemical treatment. To insure a distribution of the pulp in a uniform manner, without violence over the whole surfaces of the intermediate vats, there is an arrangement resembling a garden sprinkler. solutions which below their surfaces, are in a ORANGE GROWING IN FLORIDA.

The Business from the Producer's Point of It is stated in the Moniteur Industriel that the dark oak employed in decorative woodwork tain length of time to the action of ammoniacs issue of THE SEN says that this year's crop of Florida oranges is estimated "by an expert to vapors, the latter rapidly imparting the dark be 5,000,000 boxes, or far beyond the crop of tint which is in so much request. The operation consists simply in arranging the material that is to be rendered of a dark color in a tight room into which no light penetrates. For the treatment of sunal pieces, a large box whose joints are closed with strips of paper glued to the places whence the vapor might escape, suffices for the purpose, while, for larger pieces, a hermetically closed room is essential. Into the box, or room, are put several flat versels containing liquid ammonia, they being placed upon the floor so that the vapor may fill the space and give the tannin of the oak a very dark brown color, which will not be altered if a little of the wood be removed from the surface. The liquid is not allowed to touch the wood, and the depth and richness of the color will depend upon the quality of the ammonia that is employed and the length of time of the exposure to its fumes. consists simply in arranging the material that from Jacksonville to Orlando, and from there to this town of Starke, and I do not hesitate to

fore are not very sweet. In the southern part of the State they are later, and a large proportion of the crop is so green that many trees appear to have no fruit at a distance. They are what is called the second crop, and they will not be fit for market for some months to come.

You say the orange growers have very low rates of freight from this State. I beg leave to differ with you, as the rate from Jacksonville is not from all over the State, the rate from the orange section being anywhere from 48 to .75 cents or more per box. As to the orange growers' profit: In making a grove he has to lay out labor and money for from six to ten years before getting any return for his time or outlay of money, and then his crop will amount to a very few boxes per acre about every other year for some years more, till the trees get larger growth, but all these years they must not be neglected, as many Northern men have found to their sorrow. After a man has grown grav, having commenced to make a grove while young, perhaps he may get two or three good crops, but not enough to remunerate him for his time or outlay of money. At the present time you can buy green oranges here for 75 cents per box, delivered in bulk. The box, with paper and packing, will cost 20 cents, freight to New York 48 cents, cartage in New York 2 cents, and commission 10 per cent. If you average sales of \$1.75 per box, commission while 17% cents, making cost in New York \$1.63%, or 12% cents per box, provided he receives honest returns, which I know he does not always do. There are a few large growers with money enough to protect themselves in their rights, that will make money at perhans less than 75 cents, per box net; but where is one grower that does they packing, &c., he may realize something like 80 cents per box, provided he receives honest returns, which I know he does not always do. There are a few large growers with money enough to protect themselves in their rights, that will make money at perhans less than 75 cents, and one the well in the provide Of special interest to those who manufacture or use steam generating apparatus is the recent report of an engineering insurance company of Manchester, England. It is stated in this document that 33 per cent. of the accidents to en gines for which the company paid compensation during the year were due to weakness, faulty design, or bad workmanship; 27 per cent. were due to causes purely accidental or unascertained, and only 12 per cent. to the negligence of owners or attendants. As usual, the greater number of the accidents arose from the failure of spur gearing and from defects in the valves and valve gear, but a large percentage of the breakdowns were due to defective columns, entablatures, bed plates, and pedestais, and to the failure of screws, bolts, cotters, and straps. The percentage of thorough examinations of boilers was inety-four, and, in addition to these, there were more than three hundred internal examinations, four hundred cold water tests, and thirty-six thousand two hundred ordinary inspections; these led to the discovery of some five hundred and seventy-five cases of defective grooving, one hundred and forty-six fractures and bilsters, one hundred safety valves dangerously overloaded or altogether inoperative, and one hundred and seventy-three water gauges out of order or inoperative. Finally, the report states that, of the nearly one thousand boilers requiring early repair, a number would undoubtedly have gone on working without repair until they exploded.

In a communication to the Société de Chemique, Paris, by M. Iloswa, on the formation of secondary products containing nitrogen by combustion in air, the author considers he has proved that, on burning in air one and the same volume of coal gas and of hydrogen, one and the same weight of nitrogen is converted into ammonia, and, on burning equal volumes of coal gas and of hydrogen, the nitrogen transformed into nitrous acid will also have approximately the same weight—nevertheless, on burning carbon monoxide, nearly two and one-half times more nitrogen is found in the state of nitrous acid than in the former case. In the case of one kilogram of each of these gases being burnt, the most nitrogen in the state of ammonia, and in the state of nitrous and nitric acids, is found in the product of the combustions of hydrogen, while only one-fourth of the quantity is found in the case of coal gas, and about one-twentieth in that of burning carbon monoxide. On burning wood charcoal in air, whether merely dried or heated to redness, the quantity of nitrogen contained in the nitrous and nitric acid collected is almost equal to that of the product; there is not much difference in the result of burning an equal weight of coke, and the formation of ammonia during the combustion of coke or charcoal is merely a result of the decomposition of those substances. and the same weight of nitrogen is converted

Under the direction of the Austrian Government an establishment has for some time past been in operation at Pribram, where tests of fuel are carried out on a sufficiently large scale to enable the heating efficiency of any kind of fuel to be practically determined. In carrying out this process the Mechanical World states that ten tons of the fuel to be tested are divided into two lots of five tons each, a separate and distinct trial being made of each lot, the results thus obtained being checked one against the other. The tests, which are carried on day and night continuously, are made on a mild-steel boiler; the grate is of the steeped type, with a total surface of 23.6 square feet; the heating surface of the boiler is 624 square feet, and that of the feed-water heaters 356 square feet, and that of the feed-water heaters 356 square feet; the chimney stack is 106 feet high, the inside diameter at the bottom being 3.6 feet, and that at the top 2 feet 6 inches, thorse being a good draught for the hoiler. Special care is requisite that the boilers and accessories be thoroughly cleaned out after each test; and an analysis is also made of an average sample of the fuel, as to its chemical and physical properties, which are set forth in the certificate issued giving the result of the trial. out this process the Mechanical World states

ance that there came from among the audience out of several hundred throats the cry, "De Leon!" I do not care to here discuss whether in a strictly conventional sense this was proper; It certainly was excusable. It was so, firstly, because those who uttered the call were evidently under the impression that the meeting proper was at an end, and secondly, they had for fully an hour, while lis\_ening to the somewhat confused speech of Mr. Burns, been compelled to hear that they—the Socialists—should join the trade unions, an appeal that may be considered utterly superfluous, in view of the fact that in this city, e-pecially, there is not a single body that has done as much for the organization of trade unions as the Socialists have.

In my experience in this city, traching back twenty-five years, the "German Socialists" have only once broken up a meeting. That was when, way back in the seventies, such gentlemen as Messrs. Babcock, Simon Sterne, Oswald Ottendorfer, and other "reformers" of snow-white angelic purity endeavored to imangurate a movement aiming to rob the people of this city of their right of suftrage in municipal affairs, by introducing, instead of the prevailing universal suffrage, one based upon the size of one's money bag.

At that memorable meeting, which was held In an interesting paper read by Mr. Oisson before the Swedish Technological Society, an ac-count is given of De Laval's steam turbine, and of the ingenuity by which its great velocity is insured, the difficulties encountered in attaining this having been enormous; for, however carefully the disk might be turned, the heterogeneity of the material prevented the centre of gravity from coinciding with the theoretical axis of versal suffrage, one based upon the size of one's money bag.

At that memorable meeting, which was held in Steinway Hall, the "tierman Socialists," and they alone, appeared in full force, and succeeded in practically breaking un the meeting. At that time the "main force" on the part of the police, as recommended by The Sux, was fully applied, and many arrests were made. But the movement of the "reform" gang was killed—nipped in the bud—by the "German Socialists."

New YORK, Dec. 5. ALEXANDER JONAS. rotation, and however slight the difference might be it was badly felt at the high speed of might be it was badly felt at the high speed of rotation. A successful solution of this problem was finally reached by fitting the disk in the centre of a long clastic shaft, the spring in the shaft permitting the disk to rotate round its true centre of gravity, the centre of the shaft running somewhat out of true, while, if the shaft were stiff, the vibrations of the disk would be transferred to the bearings, which would soon get hot and be damaged. The purpose of thus making the disk self-adjusting can also be attained by the introduction of yielding bearings, though this involves compilered and costly details. The free earl of the shaft is provided with a beliand-socket bearing, so that it can adjust itself to the movements of the motion, all the bearings being also furnished with lubricating grooves and anti-friction metal to insure an effective lubrication. In the transmission box, the speed is lowered from thirty thousand to these thousand revolutions pertuinute through adouble pinion gearing with a double spur wheel. teous letter of Mr. Barclay Gallagher, sent from nunciation and published in to-day's StN, on the subject of the administration of Mayor a double pinion gearing with a double spur wheel

Field in one of his most popular posms, of which the editor of Tax Sun is the subject. "But fur-ther information and statistics he had none," declares Mr. Field, in relation to the menda-Investigations made by Mr. Redwood, an English chemist, in regard to the conditions unde which an explosive mixture of petroleum vapor and air may be ignited, show some important clous journalist, Mr. Cantell Whoppers, and the phrase of description would apply. I reluctantly admit, to the following statement contained in the letter of Mr. Galingher: facts not generally understood. It appears that neither the glowing end of an ordinary wooden match or of a "fixed star" vesuvian, the flame of which has been extinguished, nor a redhot of which has been extinguished, nor a redhot coal which has ceased to like the even a shower of sparks from a finit and steel, or from the fireworks known as scintellettes and golden rain—is capable of causing the combustion of the mixture; but a platinum wire raised to a white heat by means of electricity invariably causes ignition, though at a red neat no such effect is produced. According to Mr. Redwood, either the electric spark or a flame at once causes the explosion of such a mixture, but an inflammable mixture containing a small gronertion of vapor may be ignited by a flame that is large, when a small flame or an electric spark prayers ineffective for the purpose. To use in an oil tank of a heated rivet at a temperature below that recoilerd for igniting a mixture of petroleum vapor and air may, nevertheless, be attended with danger.

# Prom the Washington Post.

From the Washington Post.

The stage manager of a company that played in Washington hast week is one of these men who have never yet expressed unqualified approval of anything in the heavens above, in the earth beneath, or in the waters under the earth it was out with a company last year, playing melocians. In the second act of the playe there is a terride storm, and there were always termed and trouble about that storm. The stage manager never liked the way it was done, the night his company was playing in St. Jemph. Mos., which, as every player knows, has one of the hest-equipped theatres in the country. When the storm came the man at the sheet from fairly made the welkin crack. The stage manager frowned. Just then there came a terrific burst of thunder from a real storm outside.

Not a bit like it, not a bit like it: "yelled the stage manager. To was Euron or THE BUX-Sir: Abbett is dead The people's champion has passed away. Let some sturdy New Jersey workingman repeat over his bler what Mare Antony said over the body of Commr. in gratitude more than traiters swords quite van quished bim: quished him:

"O, pardon me, thou bleeding piece of earth,
Tent't am weak and gruitie with these butchers.
Thou art the ruine of the noblest man.
That ever lived in tide of times.
Who shall pronounce the fitting outogy to Abbett?
Who shall avenge his betrayal at a time when the papie needs in meet?
CHARLES TROUTING.

stage manager.

"Why, that's real thunder," ventured an actor.

"That's all right," responded the stage manager; "it's not a bit like it. That sort of thing won't go in this theatre."



KNOWLEDGE

Brings comfort and improvement and Brings comfort and improvement and tends to personal enjoyment when rightly used. The many, who live better than others and onjoy life more, with less expenditure, by more promptly adapting the world's best products to the needs of physical being, will attest the value to health of the pure liquid laxative principles embraced in the remedy, Syrup of Figs.

Its excellence is due to its presenting in the form most acceptable and please.

in the form most acceptable and pleasant to the taste, the refreshing and truly beneficial properties of a perfect lax-ntive: effectually cleansing the system, dispelling colds, headaches and fevers and permanently curing constipation. and permanently curing constipation. It has given satisfaction to millions and met with the approval of the medical profession, because it acts on the Kidneys, Liver and Bowels without weakening them and it is perfectly free from every objectionable substance.

every objectionable substance.

Syrup of Figs is for sale by all druggists in 50c and \$1 bottles, but it is manufactured by the California Fig Syrup Co. only, whose name is printed on every package, also the name, Syrup of Figs, and being well informed, you will not accept any substitute if offered.

LONDON LIVING PICTURES.

They Are Not Immodest-Lady Henry Some erset Evidently Ham't Soen Them.

"I don't know just how true the reports about Lady Henry Somerset's mission in coming to this country are," said an American who has recently returned from abroad, "but, if it be a fact that she has come here to reform New Yorkers, it is the greatest bit of presumption I ever heard of in my life. The idea of an English woman coming from that hot-bed of vice, London, to reform the people of another coun-try, is beyond comprehension. I don't under-stand it, but if it be true, it is the best evidence in the world, to my mind, of the utter insincerity of the woman.

"I read some of Lady Henry's remarks about the living pictures exhibited abroad, and as I have seen them in a half dozen different countries of Europe, and in nearly twenty-five different cities, I feel as though I ought to know something about them. Now, my lady said,

when she came here:
"If the living pictures in New York are anything like as bad as those in London, they are a disgrace to the city which should not be tolerated.

"I laughed when I read this. Why, in London the living pictures are the most artistic things imaginable. " I saw them at the Empire, at the Alhambra, and a half dozen other music halls in London, and not once did I see an exhibition which could offend the most modest. They are all based on old-fashioned subjects, such as 'I five Village Blacksmith.' My Fretty Jane, &c., and the most popular of them are those which have no women in them at all. At the Empire many of the pictures are accompanied by songs rendered by invisible persons, and, all in all, the pictures were a most artistic exhibition. No one but a crank could complain of the London living pictures, and although they are a triffe more risque in France and Beigium they are not, any of them, anything like those which we see here. So that is one field for this noble reformer.

"I simply mention this to show the utter inat the Albambra, and a half dozen other music

which we see here. So that is one field for this noble reformer.

"I simply mention this to show the utter inconsistency of the woman. She raves of the wickedness of Garden living pictures, when they are exhibitions beyond criticism, but save nothing of the notoriously retten social condition of the city of London. Now. if Lady Henry Somerset is a genuine reformer, what is she doing over here? Why don't she reform her own great city? When she has done that impossible job, it will be time enough for her to start in here."

TEN-CENT LUNCHES.

## A Young Woman Prospering on an Idea Which She Put in Operation.

There is a young woman in this city who only a year and a half ago worked twelve hours a day for \$6 a week in a restaurant down town, earning between \$60 and \$70 a week and giving employment to half a dozen other girls as well. The young woman conceived the idea of supplying ten-cent lunches to young men and women employed in the big wholesale stores along Broadway, and her present prosperous condition is evidence of the success of the scheme. Every day the business is growing, and in a very short

is evidence of the success of the scheme. Every day the business is growing, and in a very short time the young woman expects she will have to get a horse and wagon in order to deliver lunches to all her customers between 12 and 1.

The young woman started her project in the same way a business man would introduce a new article. She visited the wholesale dry goods stores, the cloak houses, the notion stores, in fact all of the big establishments from Grand street down to the Battery, getting one or two customers in each place. Me explained carefully that the lunch would include two sandwiches, an apple, orange, peach, pear, or bunch of grapes, and a tart or bit of cake, and the moderate price of 10 cents for all this won her many customers. She served seventy-five lunches the first day, and the next day almost as many again. Since then her business has shown a steady increase, and she is now on the road to fortune. Every day sandwiches of a different kind are served and different kinds of fruits and tartare delivered. The entire lunch is wrapped in tissue paper and packed in a neat little cardboard box. The girls employed by the young woman start out at 11 o'clock every day and begin distributing the boxes. At 1 o'clock their work is over. The young woman's customers are not limited to the low-salaried workers in the various stores. Salesmen, heads of departments, and members of the diff. Stent firms, take the lunches now. Every one pays for his lunch when he gets it. There is no credit, to which fact the young woman probably owes a large part of her prosperity.

#### A Thankful Mother's Letter to Mrs. Pinkham.

"Last winter I did not think my little ones would have a mother long. I suffered terribly with female troubles.



"I could keep nothing on my stomach, and got so 'poor my friends hardly knew me. I suffered with severe headaches, dizziness, faintness, backache, and 'the blues.'

"Thanks to Lydia E. Pinkham's Vegetable Compound, I am now as fat as ever, and have no female troubles.

"If you use my letter I hope it may be the means of saving some other poor mother's life as it did mine." - Mrs. Ella Van Buren, St. David, Fulton Co., Ill. At all druggists.